

BULLYING

P1 Traditional Bullying and Cyberbullying: Differences in Sex, Emotional Problems, and Personality in Victims and Aggressors

Santiago Resett, Universidad Argentina de la Empresa, & Manuel Gamez-Guadix, Universidad Autónoma de Madrid

Cyberbullying is when someone repeatedly harasses, mistreats, or makes fun of another student online or while using cell phones or other electronic devices, and the victims cannot defend themselves easily. It is very frequent in adolescence, mainly in middle adolescence. Compared to traditional bullying, cyberbullying presents unique features (anonymity, huge potential audience, disinhibition). Previous research has been inconsistent in its conclusions regarding the relationship between traditional bullying and cyberbullying. Some authors indicate that cyberbullying is an extension of bullying. From this point of view, the same student who perpetrates bullying (or suffers from) also perpetrates cyberbullying (or suffers from). Other authors suggest that cyberbullying is a qualitatively different phenomenon, and that the psychosocial correlates of these two groups are quite different. Few studies have examined differences in gender, emotional problems and personality of those involved in cyber and traditional bullying. Aims: 1) to explore the overlapping between traditional bullying and cyberbullying and 2) to examine correlates of emotional problems and personality for those involved in traditional bullying and cyberbullying. An Argentinean sample of 898 secondary school student was recruited (46% male, mean age=15.2). Olweus Bully/Victims Questionnaire and Calvet et al. Cyberbullying Questionnaire were applied. They also completed GSOEP Big Five Inventory, Rosenberg Self-esteem and Psychosomatic Scale (anxiety), and Kovacs Depression Inventory.

Results show that 75% of participants were not involved, 11% were traditional victims, 6%, cyber-victims, and the remaining 9% traditional/ cyber-victims. For bullying, the percentages were: 82%, 6%, 8%, and 4%, respectively. No gender differences emerged in victim status, but more males were aggressors. Traditional/cyber-victims scored high in depression, anxiety, and low in self-esteem compared to the remaining groups. Traditional victims and cyber-victims did not differ in the level of emotional problems, but traditional victims scored lower in self-esteem. Cyber-aggressors presented a similar level of self-esteem as the not involved. With respect to personality, traditional/cyber-victims presented lower levels of Conscientiousness, Extraversion, Agreeableness, and a higher level of Neuroticism compared to the remaining groups. When compared for aggression status, not involved groups and cyber-aggressors showed less depression than traditional aggressors and cyber/traditional aggressors. Cyber-aggressors scored lower in Conscientiousness and higher in Agreeableness and showed lower Neuroticism than traditional aggressors. The results suggest that there is little overlapping between traditional bullying and cyberbullying. Regarding the correlates of victimization, the effect of suffering from traditional bullying and cyberbullying were quite similar. Those who suffered from both forms of bullying presented the most negative psychosocial correlates. On the other hand, cyber-aggressors are characterized by personality profiles different from traditional aggressors. The literature on aggressors has distinguished between Machiavellians (socially integrated) versus maladjusted (socially marginalized). Cyber-aggressors (high Agreeableness and low Conscientiousness) resemble Machiavellians aggressors.

P2 Trend Analysis (2006-2010-2014) of Physical, Verbal and Relational Bullying Victimization Prevalence in Spanish Adolescent Schoolchildren

Inmaculada Sánchez-Queija, Irene García-Moya, M. del Carmen Moreno, & Carmen Paniagua, University of Sevilla, Spain

Bullying is defined as a situation in which a student is frequently and intentionally attacked by one or several students who are in a position of power in comparison to the victim. According to frequently used classifications, the main types of bullying comprise of physical, verbal and social or relational bullying.

The most recent report about school bullying in secondary education by the Spanish Ombudsman (Defensor del Pueblo, 2007) noted a decreasing trend in bullying prevalence between 1999 and 2006, although certain variations were found across different types of bullying. Specifically, direct forms of verbal bullying such as insulting or giving offensive nicknames, and certain forms of relational bullying such as being ignored, diminished significantly. In contrast, physical abuse and other forms of relational aggression remained unchanged.

Given the increasing social concern about bullying and the number of interventions that have been developed to promote school safety in recent decades (Observatorio Estatal de la Convivencia Escolar, 2010), it is fundamental to know whether bullying prevalence in Spain has changed since 2006, both globally and in its specific forms.

The present study analyzes trends in bullying victimization prevalence in a representative sample of Spanish adolescent schoolchildren in 2006, 2010, and 2014. In addition to the variables gender, age, and edition, an adaptation of the Revised Bully/Victim Questionnaire (Olweus, 1996), included in the HBSC questionnaire, was used. Results showed an overall upward trend for the 3 types of bullying between 2006 and 2010 and stability or a slight decrease between 2010 and 2014 with the resulting prevalence of physical, verbal, and relational bullying in 2014 being significantly higher than in 2006 for all age groups. Gender differences were found across all age groups, with a lower prevalence of physical and verbal bullying in girls and no significant differences between girls and boys in relational bullying. However, in the 11-12 age group the likelihood of being a victim of relational bullying was also slightly lower in girls.

Previous research has stressed the importance of implementing programmes in childhood and adolescence to promote school safety and prevent school violence which, in view of the break in the declining trend in bullying prevalence that this study shows, is worth reiterating. In addition, it is crucial that all interventions are based on evidence and that their effectiveness is assessed so that the available resources are invested in effective interventions with sound quality standards.

P3 Spectators as key figures in bullying

Cristina García-Fernández, University of Sevilla, Eva M. Romera-Félix, Rosarion Ortega-Ruiz, University of Córdoba, Spain, et al.

The role of bystanders is identified as key for the appearance, development, maintenance and disappearance of bullying behaviors. Although the literature on bullying has indicated some factors that describe different behaviors within the dynamics, little research has focused on the role of social context as explicative of defending, reinforcing or passive bystander behaviors in bullying. This paper aims to explore the behavioural responses of

bystanders when they witness the occurrence of bullying, and seeks to contribute to the knowledge about the role of social adjustment between peers in the behavior of bystanders harassment. Participants were 1278 schoolchildren (47.7% girls) of primary education, aged 10 to 14 years ($M = 11.11$, $SD = 0.75$) and the "Questionnaire for Research of School Violence in Andalusia: CIVEA" (Ortega, Del Rey & Mora-Merchán, 2008) was used which identified the phenomena and the roles of participation in each of them.

The results of contingency coefficient offer a right value of association between the different profiles of bystanders and gender, $\chi^2(3, 1265) = 8.292$, $p < .040$, $C = .081$, suggesting a higher involvement of girls with 51.1% in the group of prosocial bystanders or defending, similar percentages between boys and girls for the passive bystanders (50% boys, 50% girls), and 54.5% of involvement for reinforces. Statistically significant differences depending on the variable current involvement in each of the roles of bystanders $\chi^2(3, 1278) = 11.485$, $p < .009$, $C = .094$, the percentages of involvement were observed to be something more high in 6th grade (5th = 49.4%; 6 = 50.6%), although with a distribution that presents the passive bystanders, with 51.1%, in the 6th grade, the prosocial viewers with 50.6% in the 6th grade, and reinforces with 100% in the 5th year.

The H Kruskal Wallis test indicated statistically significant differences for social adjustment among peers and between the different roles of bullying dynamics. The post hoc analysis with pairwise comparisons by the Mann-Whitney U test showed less social setting with peers of the passive viewers when compared with the group not involved ($p < .001$), prosocial viewers ($p = .001$) and the reinforce viewers ($p = .001$). However, viewers were indifferent socially less adjusted compared defenders ($p < .001$). Finally, the reinforcing less social adjustment that the group of spectators prosocial ($p = .003$).

The findings show the descriptive value of social adjustment among peers in different roles developed by bystanders in harassment, indicating the importance of social support to react in a prosocial way to situations of harassment in school.

P4 Prevalence of cyberbullying in Spain: influence of gender and course variables.

Eva Solera, University of La Rioja, Spain, Juan Calmaestra, University of Córdoba, Spain, Roberto Ruiz-Barquín, Autonomous University of Madrid, Spain, et al.

In the last years international research on cyberbullying has increased, as evidenced by the meta-analysis made by Kowalski, Giumetti, Schroeder and Lattanner (2014). The first study made in Spain was carried out by Ortega, Calmaestra and Mora-Merchán (2008). Subsequently, there have been different investigations at national level using local samples, existing problems of generalization and extrapolation in the results for all national territory. Although Garaigordobil (2011) points out that there seem to be differences in the prevalence of cyberbullying among countries, actually it is difficult to know the accurate situation in Spain. For these reasons, the present study tries to determine more accurately the prevalence of cyberbullying in function of gender and course. The instrument used is the questionnaire of Cyberbullying ECIPQ (Del Rey, Casas and Ortega, 2012). The sample is composed by 25.935 students (12.513 boys and 13.422 girls), with the age mean of 13.95 years (mean_boys = 13.98, $SD = 1.42$; mean_girls = 13.91, $SD = 1.37$) of the secondary schools from all Autonomous Communities of Spain. The statistical analyzes made have been frequency analysis, averages and standard deviations, analysis of difference of averages for several independent samples (ANOVA), test of homogeneity of variances (statistical Levene) and post hoc tests (Games-Howell). The evaluation was made during the year 2015. The design of the study is descriptive of populations through surveys with probabilistic samples

of the transverse character (Montero y León, 2007). The obtained results show that the 9.8% are victims, 3% are bullies, 6% are bully/victims and 81.2% are not involved. The percentage of victim girls is higher than that of boys in the different courses, while the bullies and bully/victims girls is lower than that of boys in the different courses. In the same way, the percentage of girls not involved is greater than that of boys in 1º and 4º of ESO and lower in 2º and 3º. These data show that there are differences in the behavior of boys and girls, and the existence of significant changes depending on the variable "course". So is important to take into account these aspects for the design and development of concrete actions with the objective of prevent and/or intervene in such situations.

Acknowledgement: This paper was made possible by the project entitled Bullying, Cyberbullying and Associated Factors funded by Save the Children® Art 83 LOU contract with the Foundation of the Autonomous University of Madrid (Code: 056900).

P6 The complex interplay between bullying and perceived popularity in the classroom: A social network investigation

Rozemarijn van der Ploeg, Christian Steglich, & René Veenstra, University of Groningen, Netherlands

School bullying is a persistent problem that affects all those who are involved. In the past, bullying was often considered an uncontrolled outburst of aggression. Nowadays, bullies are thought to bully to achieve a dominant position in the classroom (e.g., Volk, Dane, & Marini, 2014).

Although it has been acknowledged that the association between bullying and perceived popularity is bidirectional (Sentse, Kretschmer, & Salmivalli, 2015), little is known about their longitudinal interplay. It remains unclear how the co-development of bullying and perceived popularity evolves within the peer group. The aim of this study was to further unravel the relational patterns of bullying and perceived popularity by using longitudinal multivariate social network analysis (SIENA). Hereby we especially sought to expand the understanding of processes that would explain more precisely how bullying and popularity are intertwined. Specifically, we focused on the maintenance of existing ties and the formation of previously non-existing ties.

We expected that bullying is a way to gain and maintain popular status in the classroom. Yet, the interplay between bullying and perceived popularity can develop according to several mechanisms: ties can be created, dissolved or maintained (Ripley, Snijders, Boda, Vörös, & Preciado, 2015). With regard to bullying as a way to gain popularity, we hypothesize that (initiating) bullying makes students popular especially among those classmates who did not perceive them as popular before. Moreover, we hypothesize that those who already perceived the 'new bully' popular will not reconsider this. Concerning bullying as a way to maintain a popular status, we hypothesize that being perceived as popular will lead to the formation of new bully relations over time and the dissolution of existing ties.

Participants were 2055 students (50% boys) from 82 classrooms and 15 Dutch primary schools. Data were collected between May 2012 and May 2013 when the participants were in grades 4-6. Popularity and bullying networks were based on peer-reports. Students were asked to nominate an unlimited number of classmates whom they felt were popular and by whom they were victimized.

Longitudinal social network modelling in RSIENA was used to test our hypotheses.

Classroom results were combined in a meta-analysis, which showed that over time, bullying

makes students popular ($B = 0.09, p < .01$) and being popular encourages bullying ($B = 0.24, p < .001$). Specifically, it was found that bullying makes students popular among certain classmates who did not consider 'the new bully' popular before ($B = 0.23, p < .001$). Moreover, the outcomes indicated that popular students discontinue bullying their former victims ($B = -0.41, p < .05$) and start bullying classmates whom they did not bully previously ($B = 0.82, p < .001$).

The social network approach contributes to a better understanding of the complexity of bullying. Our findings imply that popularity is key to involvement in bullying. Teaching bullies prosocial ways to gain or maintain their status is probably essential to effectively intervene in school bullying.

P7 Rejected amongst Peers and Violence: are Rejected Teenagers the most Violent ones?

Celeste Montero, University Pablo de Olavide, Sevilla, Spain

Social integration inside the classroom and social reputation are fundamental for adaptive development and psycho-social adjustment in infancy and adolescence, and friendship is essential for well-being, development and attainment of academic success. In the school context peer groups are formed depending on a series of characteristics, so that different groups with different social status among peers emerge.

It is important to analyse the socio-metric status because studies have shown an association between the degree of social acceptance in the peer group and violent conduct and victimization.

The aim of the present study was to analyse the relations between different types of social status (popular/rejected/ignored/average and controversial), and victimization, school violence (manifest and relational), cyber-bullying and cyber-victimization. 2399 teenagers of both genders enrolled in school in 6 educational centres of Andalusia (48 % boys and 52 % girls) took part in the study. We used correlational analyses as well as MANCOVA and ANCOVAs. The results showed that rejected students showed a higher degree of manifest but not relational violence than other groups, and also had higher scores in cyber-victimization and cyber-aggression. Finally, the results and their practical implications are discussed.

P8 Sexuality and aggressions: myths shared in adolescence

Lázaro-Visa, S., Fernández-Fuertes, A., Fernández-Rouco, N. & Gómez E., Universidad de Cantabria, Spain

Violence against women is one of the greatest concerns that our society has. As literature has shown, gender stereotypes and myths regarding sexuality can turn into a justification for gender violence. Consequently this work is focused on sexual coercion among youths: we attempt to know to what extent adolescents have different myths related to sexual aggression, accepting or normalizing these behaviours.

A sample of 330 participants between 15 and 19 years old ($M = 16.33; DT = 0.79$) was surveyed from high schools in Cantabria (Spain). In order to carry out the study, the Acceptance of Modern Myths about Sexual Aggression (AMMSA; Gerger, Kley, Bohner & Siebler, 2007) scale was used; an example of an item is "Many women tend to exaggerate the problem of male sexist violence".

Results show, on the one hand, that some myths about sexual coercion are common among

adolescents: for example, 48.6% of the sample stated that “A lot of women strongly complain about sexual infringements for no real reason, just to appear emancipated”; in addition, a very frequent misconception is that “Alcohol is often the culprit when a man rapes a woman” (41.3%). On the other hand, surprisingly, figures show that there are no gender differences between male and female participants or significant differences found between the sexes have a low size. According to the data obtained, sexual education must have a more important role in school curricula in Spain, where education on this topic has been poorly implemented.

TEACHERS AND CLASSROOM PRACTICES

P9: INVITED POSTER: Only Three Fingers Write, But The Whole Brain Works: Is the Pen Mightier than the Word?

Audrey van der Meer & F.R. (Ruud) van der Weel, Norwegian University of Science & Technology (NTNU), Norway

Electroencephalogram (EEG) was used in young adults to study brain electrical activity as they were *writing* or *describing* visually presented Pictionary™ words using a keyboard, or as they were *drawing* the same words using a stylus. Analyses of temporal spectral evolution (TSE, time-dependent amplitude changes) were performed on EEG data recorded with a 256-channel sensor array. Our results showed that in the *drawing* condition, brain areas in the parietal and occipital regions showed Event Related Desynchronizing (ERD) activity in the theta/alpha range. These findings are consistent with existing literature and are often reported to provide an optimal background for learning. In the *describe* condition, beta/gamma range activity in the central and frontal regions could be observed, especially during the early stage of cognitive processing. Such activity is often associated with the involvement of higher cognitive, top-down processes and the creation of ideas.

It was concluded that because of its obvious benefits for sensory-motor integration and learning, handwritten notetaking is introduced back into the classroom. Sensory-motor information for the control of (pen) movement is picked-up via the senses and because of their involvement they leave a wider mark on establishing pathways in the brain resulting in neural activity that governs all higher levels of cognitive processing and learning. Therefore, rich sensory-motor experiences seem to facilitate learning. With several new stylus technologies available on the market today this may be the way to go to have an electronic record of one's notes, while also having the benefit of being able to integrate the information as it comes in via the senses and is subsequently processed in the various parts of the brain through movement.

P11 The impact of academic self-concept on social relations and motivation among adolescent students

Olga Bakadorova & Diana Raufelder, Ernst-Moritz-Arndt University Greifswald, Germany

School self-concept presents an important issue in educational research, being both a constituent and a result of learning situations (Marsh, Craven & MacInerney, 2005). It not only stands in a cyclic dependency with academic achievement (Marsh, 1990), but also supports better adjustment in secondary school (Marsh & Martin, 2011). Moreover, high academic self-concept contributes to psychological well-being (Craven & Marsh, 2008),

being an important protective factor (Steinhausen & Winkler-Metzke, 2001) during the time of adolescence and school transition. At the same time, low self-concept results in problematic behavior and negatively affects social competence (Marsh, Parada, & Ayotte, 2004), putting adolescents who are already vulnerable during this period of time further at risk.

Especially in adolescence both peers and teachers gain in importance (Harter, 1996). While peers provide attachment (Rubin, Bukowski, & Laursen, 2009), emotional comfort (Azmitia, Cooper, & Braun, 2009), and learning support (Seiffige-Krenke, 1990), positively affecting academic motivation and achievement (Birch & Ladd, 1996), teachers' support helps maintain students' school self-concept (Skaalvik & Skaalvik, 2013) and commitment to learning (Becker & Luthar, 2002). However, during the time of school transition the possibilities to establish positive relations both with teachers and the new peer group are limited (Rosenberg, 1979), presenting a threat for the positive self-concept development. The current study addresses the influence of social relations with teachers and peers on motivational, learning and educational processes in order to gain a better understanding of possible differences between the needs of adolescent students with high or low academic self-concepts.

Qualitative interviews with semi-structured interview guideline (Smith & Osborn, 2003), addressing school process, social relations and motivation were conducted among 36 German-speaking adolescents from 23 schools in Brandenburg. This sample, determined by a prior longitudinal quantitative study (N2011 = 1088; N2013 = 845), identified the students with constant high (HSSC) and low (LSSC) self-concepts. The HSSC group consisted of 7 boys, 11 girls (MAge = 16.3, SD = .53); LSSC group encountered 10 boys, 8 girls (MAge = 16.5, SD = .55). The interviews underwent inductive thematic analysis (Braun & Clarke, 2006) with an inter-rater agreement of $\kappa \geq .89$.

The results suggest peers are an important source of motivation for all students (Wentzel, 2009), contributing to a positive social climate (Wilson, 2004). However, there are also significant differences between the groups in regard of sources of motivation, competition levels as well as acknowledgement, the latter typical of HSSC students only. Positive relations with teachers provided emotional comfort for both groups, facilitating students' motivation (Federici & Skaalvik, 2014). However, while HSSC students were motivated both from positive feedback and critique, LSSC students reported the need of fairness and encouragement from their teachers.

The findings suggest that the existing possibilities to maintain high academic self-concept at secondary school are limited as long as teachers remain unaware of their students' individual needs.

P12 Motivational and emotional aspects of learning mathematics in transition to early adolescence

Mojca Poredoš, & Melita Puklek Levpušček, University of Ljubljana, Slovenia

The aim of the study was to examine relationships between motivational and emotional factors and academic achievement in transition to early adolescence, more specifically, at the transition from lower (Grades 1 – 5) to higher (Grades 6 – 9) levels of Slovenian primary school. According to Eccles et al.'s stage-environment fit theory, significant changes in school environment appear during the transition to adolescence which do not fit with the developmental needs of adolescents. A decline in motivation for school work appears because academic goals compete with social goals and leisure activities.

The sample consisted of Slovenian students (N = 599; 50.75 % girls) who participated in a larger follow-up study Motivational and emotional factors of academic achievement in mathematics and natural science in early adolescence, which took place in the school year 2014/2015 in Grades 5, 6 and 7. The students responded to questionnaires about their academic motivation (Patterns of Adaptive Learning Scales, PALS, Midgley et.al., 2000), attitudes towards mathematics (used in TIMSS 2011), and school anxiety in mathematics (SAI, García-Fernández, Inglés, Martínez-Monteaudo, Marzo, & Estévez, 2011) in the middle of the school year. Final grades and National Examination Test (NET) scores in mathematics were used as indicators of students' academic success. While teachers use a 5-level grading scale to evaluate academic outcomes, the NET scores are distributed on a 100-point scale and thus provide a more sensitive measure of student's performance. In this study, the information about the NET scores was obtained for the 6th grade participants who completed their NET in mathematics in June 2015.

We analyzed grade and gender differences in motivation, level of anxiety and attitudes towards mathematics. MANOVA showed significant yet small effects of grade and gender in a model that included all variables. Fifth graders reported higher mastery goal orientation, performance-approach goal orientation, and performance-avoid goal orientation, and they showed more positive attitudes towards mathematics than 6th and 7th graders. Furthermore, fifth graders experienced higher anxiety about social evaluation in mathematics than 6th graders. Girls reported higher mastery orientation, more positive attitudes toward mathematics and higher levels of school anxiety in mathematics than boys. Mastery goal orientation, liking mathematics and school anxiety moderately correlated with academic achievement (final grade and NET results). Controlling for final grade in mathematics in the previous academic year, mastery goal orientation, cognitive anxiety and liking mathematics were statistically significant predictors that explained an additional 3 % of variance of the final grade. When predicting NET results, only cognitive anxiety appeared as an important predictor (explained 7 % of variance) after controlling for the previous final grade in mathematics.

In conclusion, we found the greatest decline in academic motivation and positive attitudes toward mathematics from Grade 5 to Grade 6. Early adolescent students, who are in transition from lower to higher levels of primary school, are especially vulnerable and demand different approach to teaching to remain successful. Also teachers should be more attentive to anxious students, since anxiety was found to be an important predictor of final grades and NET results.

P13 Youth mobility in Europe within the framework of vocational training and its fostering and hindering factors. A qualitative case study of Germany and Spain

Cristina Cuenca García, Colegio de Politólogos y Sociólogos de Madrid, Spain, Karin Hemming, Christin Warketin, German Youth Institute, et al.

The current study aims to analyze differences in hindering and fostering factors for mobility of young people in vocational training (VET) in Germany and Spain through a qualitative analysis. As cross-border geographic mobility during vocational training is relatively low compared to student mobility, the overall European objective for 2020 is to raise the ratio of cross-border mobility within the framework of vocational training from 2% to 6% (European Council & European Commission, 2012/C70/05). Our research has received funding from the EU-Horizon 2020 research and innovation programme under grant agreement No.649263. It covers differences and similarities among framework conditions of vocational training

between Germany and Spain regarding mobility experiences.

The current study is based on qualitative interviews with adolescents (NDE=5; NES=5) and experts (NDE=2; NES=5). The interviewed VET-students were aged between 18 and 29, and had a mobility experience of at least 2 weeks to another European country. The experts were either teachers at VET-schools or specific consultants for mobility. The testimonies of experts and youth are triangulated with framing and structural conditions allowing us to compare results in order to inform policies regarding youth mobility during VET.

The structural labour-market conditions in Germany and Spain differ, as Spain is suffering under the financial crisis with a high youth-unemployment rate whereas Germany has a strong economy with a low unemployment rate. Hindering factors for mobility in both countries are: 1) lack of a national institution acting as an information point, 2) lack of local consultancy persons, 3) lack of available seats in organised youth-mobility programs, 4) lack of information for VET-students about their right to study abroad. In Spain additionally return programs are missing. Fostering factors in Germany and Spain are: 1) financial support of national and EU-programs is available, 2) mobility consultants and their networks as important drivers, 3) Europass as documentation tool, 4) Integration into VET (no missed-out time). In Germany VET-schools offer organised short term group mobilities between 2-4 weeks, taking away anxiety for the adolescents. As Spanish VET-schools aim to foster their youth moving to Germany they build up cooperation with German VET-schools and enterprises and try to foster long term mobilities or entire VET.

To put it in a nutshell, cross-border mobility during VET is working out well for some youth but is also facing similar problems in Germany and Spain. More national programs, consultants and experts are needed to foster mobility. Also a national institution for mobility during VET bundling available programs, funding and information is needed in both countries for reaching the 6% hurdle in 2020. Therefore, additional cooperation between Spanish and German VET-institutions would be fruitful.

P14 The Direct and Indirect Relationships Between School Attachment, Constructive Conflict Resolution Behavior and Aggression

Nermin Koruklu, Adnan Menderes University, Turkey

The aim of the study was to investigate the direct and indirect relationships between school attachment, constructive conflict resolution behavior and aggression. The participants of the study were 474 6th grade students who attended 3 different middle school in the province of Aydın. 48.9% of the participants (232) were female and 50.6% (240) of the participants were boys. The average age of the participants was 12 ($Ss=.505$) and the age range was between 11 and 14. The students were picked randomly. Based on the findings, it was found that school attachment (school, teacher and peer attachments) had had a positive relationship with constructive conflict resolution behavior, and a negative relationship with aggression. In addition to this, it was found that the sub-dimensions of school attachment (school, teacher and peer attachments) had had negative relationships with aggression.

The direct and indirect relationships between school attachment, constructive conflict resolution behavior and aggression were tested using two different models, and it was observed that school attachment had a positive relationship with constructive conflict resolution and a negative relationship with aggression, while constructive conflict resolution had a negative relationship with aggression. The direct and indirect relationship between school attachment and aggression was investigated in Model 1 and it was seen that the

relationship between the two was very strong and the indirect effect of the path from school attachment to aggression through constructive conflict resolution behaviour was statistically significant. Then, in Model 2, only the indirect effect of the path from school attachment to aggression through constructive conflict resolution behaviour was tested. Based on the findings, the path through constructive conflict resolution was significant. Suggestions on the prevention of violence in schools were discussed in the light of findings.

P15 Unmotivated students: The emerging profiles via two motivational frameworks

Christine Cannard, & Catherine d'Aubigny, University Grenoble-Alpes, France

Motivation is a key concept in education. Self-Determination Theory proposes a continuum of four regulatory styles reflecting differing degrees to which the value and the regulation of the requested behavior have been integrated (Deci & Ryan, 1985): both intrinsically motivated and well-internalized activities were said to be autonomously regulated, whereas activities that have been partially internalized or not internalized at all were said to be regulated by controlled motives. In contrast, unmotivated people don't act at all or act without volition. In school, unmotivated students need attention in order to counteract the risk of dropout (Vallerand, Fortier & Guay, 1997). However, in contrast to motivation, little attention has been devoted to amotivation.

The purpose of this study has been to map out the motivational profiles of students on the basis of quantitative and qualitative theories. A total of 418 French students from grades 12-13 completed the Academic Motivation Scale (AMS; Vallerand et al., 1989). Four subscales assessed amotivation (e.g., "Honestly I don't know why I go to school; I really feel that I'm wasting my time in school").

Four motivational profiles emerged from cluster analysis based on either three variables (autonomous, controlled, and amotivation) or on five variables (intrinsic, identified, introjected, external, and amotivation). By focusing on amotivation, the two solutions depicted two groups characterized by low levels of amotivation versus two groups with high levels of amotivation. Among those with low amotivation, some had high motivation (both autonomous and controlled); others had low motivation. The latter, who were neither motivated nor unmotivated, were called resigned, while the former were called highly motivated. Among those with high amotivation, some had poor motivation (i.e., low autonomous and high external regulation); others had very low scores on both autonomous and controlled motivation. Without any volition or reason to take action (reflecting the total loss of motivation), the latter were called demotivated. To better understand the former, we analyzed the four-cluster solution based on the 5 distinct motivational dimensions instead of the two combined self-determination's dimensions. Students in this group showed high level of identified regulation and very high levels of introjected and external regulations. Despite the onset of internalization of extrinsically motivated behaviors, it would seem that they still feel controlled by external motivations. They are highly unmotivated because they don't see relationships between outcomes and their actions. It is not necessarily a lack of autonomous regulation, but a failure to internalize that is important in dropout. New educational perspectives to prevent drop-out can be then progressively envisaged.

P16 Knowledge and attitudes towards sexuality in adolescence: what should be focused upon in education programmes?

Noelia Fernández-Rouco, Susana Lázaro-Visa, Eva Gómez, & A. Fernández-Fuertes, University of Cantabria, Spain.

Sexuality is conceptualized as a dimension of personal identity and a normative aspect of adolescent development. Nevertheless, sexual education is one of the outstanding issues in adolescent's school education. This cross-sectional study purposes to describe different aspects related to sexual health and sexual affects (i.e. sexual assertiveness, attitudes towards sexuality or love, HIV myths, etc.). Accordingly, this paper shows the results of a quantitative study about sexual knowledge, attitudes and behaviour among a sample of Spanish adolescents. 909 adolescents between 15 and 19 years old (M = 15.24; DT = 1.00) participated, 458 men and 461 women from high schools in Cantabria (Spain). The results highlighted the frequent presence of myths related to sexual health and affects. In addition, erotophilic attitudes and assertive behaviours are present are far away from desirable. Moreover, according to the previous research, women frequently show a greater degree of knowledge and more positive attitudes than their male peers. In any case, the data points out the need to develop sexual education programmes as well as to reconsider the secondary school curriculum in order to incorporate such contents.

P17 Non-traditional students in Germany – Comparing two cases

Monique Landberg, Friedrich-Schiller-University Jena, Germany

Certain types of students (e.g., older students, part-time students) are perceived as non-traditional students (Teichler & Wolter, 2004). This subgroup of students has been neglected for quite some decades in Germany. The same is true for life-long learning opportunities offered by universities. In recent years this changed (e.g., Kerres et al., 2004; Hochschulpakt 2020). However, compared to other countries, the strategies and means to tailor programs to the needs of certain groups need to be further developed (Kerres, Schmidt, & Wolff-Bendik, 2012). Windows of opportunities for making certain transitions in the occupational domain are still narrow (Tomasik & Heckhausen, 2002) and chances especially for social upward mobility are still not high enough in Germany (OECD, 2016). However, there is a strong political will to change this situation which is underlined by many pilot projects at various universities (Kerres, Hanft, Wilkesmann, & Wolff-Bendik, 2012; Berg, Grendel, Haußmann, Lübbe, & Marx, 2014).

De-Standardisation of life path

If and how the life path is increasingly destandardized is still debated (e.g., Scherger, 2013). However, the favor is in arguing for a destandardization (e.g., Beck, 2001; Sennett, 1998). Besides this scientific debate with no final conclusion, it is important to take the perception of individuals into account and explore the relation of the individual biography and becoming a non-traditional student; hence, following an atypical pathway as researchers would categorize it. Furthermore, to meet the needs of a more diverse student population, research is needed which explores who the non-traditional students are and what they need to be successful students.

- 1) Which relationship can be seen between biography and the initiation of higher education?
- 2) Which factors (e.g., persons, contexts) are relevant in this process?

3) How is the own life path perceived?

Two narrative interviews with non-traditional students were analyzed according to the steps suggested by the method of „Zirkuläres Dekonstruieren“ (Jaeggi, Faas, & Mruck, 1998). This inductive approach consists of two main parts. Firstly, each interview is analyzed separately. Secondly, both analyses are brought together and are systematically compared. This allows for contrasting the two interviews intensively and systematically based on the above mentioned research questions.

Preliminary analysis indicates that the decision for starting to study is grounded in the life path of the individual. Furthermore, especially context factors such as preparation courses which could be offered by the university would facilitate the adaption process of non-traditional students in the academic setting. Furthermore, the atypical educational pathway is not perceived as a detour; but as a logical result of individual development.

Non-traditional students might become more prevalent in the future. To know more about their experiences, needs and wishes helps universities to accommodate a more diverse student population and reduce dropouts. Furthermore, the insights might challenge scientific assumptions about linear and non-linear development and help to gain a broader picture on how we as researchers would or should categorize certain educational pathways compared to the individual perception.

P18 HIV/Aids Awareness and Attitude Towards Sexual Behaviour Among Adolescents in Nigeria

Valentine Ayo Mebu, Nigeria Police Academy & Esther Omale Valentine, Maitama Sule Academy, Nigeria

The purpose of the study is to determine the level of HIV/AIDS awareness and attitude towards sexual behavior among adolescents in Nigeria. A descriptive survey research design was adopted for this study. A total of 368 adolescents from some secondary schools in Kano metropolis were incidentally sampled. The Adolescents HIV/AIDS Awareness Scale (AHAS) and Attitude Towards' Sexual Behavior Scale (ATSBS) developed and validated by the researcher were the instruments for data collection. Three research questions and three research hypotheses guide the study. The data were analyzed using descriptive statistics, t-test and Pearson Product Moment correlation method. Results revealed that a higher proportion of the adolescents are aware that HIV/AIDS really exist and they equally have knowledge of basic facts on HIV/AIDS. The result also showed that a significant difference exists in awareness of HIV/AIDS and sexual behavior of adolescents. There was also a significant difference in the sexual behavior of male and female adolescents. The paper recommends among other things that all stakeholders involved in HIV/AIDS prevention and control should create more awareness and campaign rigorously about the evidence and basic facts on the disease to curb sexual irresponsibility among adolescents.

P20 Evaluation of a training program for inductive reasoning with a particular emphasis on the specificity and stability of the effects, the socio-cultural context and parental beliefs

Emadaldin Ahmadi Sartakhti, Peter Noack, & Rolf Steyer, University of Jena, Germany

In the recent years, there has been accumulating evidence that training of inductive reasoning improves fluid intelligence. This project links three research paradigms, one that studies the efficiency and durability of a training program for inductive

reasoning on fluid intelligence abilities and also mathematics scores in a different cultural context and educational system (i.e. in Iran) and a second one that aims at comparing impacts of two types of training methods in different socio-economic levels. In the latter, influence of parental beliefs concerning development and education and family education practices on the intellectual abilities and school achievement of children will be examined, as well.

In the present study, we adopted the Cognitive Training for Children (CTC) program, which has been designed by Klauer (1989) to assess developmental change in inductive reasoning. In addition to the main effects, possible moderators will be examined. Conditional training effects depending on pretest ability, motivation of pupils, and religious level will be tested.

The study was executed in Tehran, capital of Iran. Existing classes of fifth grade students from two different socio-economic level will be involved in the study. Eight classes (4 males, 4 females) constitute the experimental groups (Experimental1 and Experimental2 group). The control group includes four classrooms (2 males, 2 females) and consists of similar children in respect of quality of education and socio-economic statement background.

The study is conducted in one private school as middle socio-economic status and one state school in a rural area as low socio-economic status.

The design is a pretest-(no) treatment-posttest design with several posttests at three occasions of measurement. For analyzing data, we will use EffectLiteR; a software which has been developed by Lisa Diezfelbinger, Axel Mayer, and Rolf Steyer (2014) for the analysis of conditional and average treatment effects in such a design. The first results examining training effects and its possible moderators will be presented.



Saturday, September 17, 14.00-18.00

Poster Session B (2)

TEST CONSTRUCTION AND MEASUREMENT

P22 Utility of the DSM-5 limited prosocial emotions subtype of conduct disorder among a Portuguese sample of male and female juvenile offenders

Pedro Pechorro, University of Sevilla, Spain, Cristina Nunes, University of Algarve, Portugal, Lucía Jiménez, University of Sevilla, Spain, et al.

The aim of the present study was to analyze the relevance of the DSM-5's Conduct Disorder new Limited Prosocial Emotions (CD LPE) specifier among incarcerated juvenile offenders. A Portuguese sample of 201 males and 98 females from the Juvenile Detention Centers

managed by the Portuguese Ministry of Justice diagnosed with Conduct Disorder (CD) was used.

Results showed that male juvenile delinquents with the CD LPE specifier scored higher on callous-unemotional traits (CU), general psychopathic traits, psychopathy taxon membership, self-reported delinquency, and crime seriousness, and lower on prosocial behavior and social desirability, while female juvenile delinquents with the CD LPE specifier scored higher on callous-unemotional traits (CU) and general psychopathic traits, and lower on prosocial behavior. Significant associations for both genders were found between the CD LPE specifier and age of crime onset and first problems with the law.

We conclude that the CD LPE specifier is indeed useful in the characterization of delinquent male youths, allowing the variables analyzed from this perspective to highlight a number of problematic issues that characterize them. Unfortunately, the specifier seems to be much less useful when we consider delinquent female youths.

Nonetheless the new CD LPE specifier is important for the early identification of young people at potential high risk and for the rigorous assessment of young people who have already come into contact with the judicial system, thus helping to identify unique etiological pathways in the development of antisocial behavior and promoting an empirically grounded basis to guide interventions.

P23 Psychometric properties and gender invariance of the Social Anxiety Scale for Adolescents among a sample of Portuguese youths

Pedro Pechorro, University of Minho, Portugal, Lara Ayala-Nunes, University of Sevilla, Spain, Cristina Nunes, University of the Algarve, Portugal, et al.

Social anxiety involves marked and persistent fear of one or more social situations, is a common psychological disorder that often emerges during adolescence and is associated with significant functional and emotional impairment. Over the last decades there has been an increased interest in assessing social anxiety in adolescents. Detection and clinical assessment of social anxiety are important because without an early screening and intervention adolescents are unlikely to spontaneously remit.

This study examines measurement invariance and psychometric properties of the Social Anxiety Scale for Adolescents (SAS-A). The participants were 782 youths (371 males and 411 females), with an average age of 15.87 years ($SD = 1.72$), attending public schools in three different regions of Portugal.

The results support the original three-factor structure of the SAS-A (Fear of Negative Evaluation, Social Avoidance and Distress – New, and Social Avoidance and Distress – General dimensions), with measurement invariance being found across gender, and females scoring higher than males on two subscales (Fear of Negative Evaluation and Social Avoidance and Distress – New). High levels of internal consistency were found.

The convergent validity of the SAS-A with a measure of empathy revealed mostly positive moderate correlations. The discriminant validity of the SAS-A and its dimensions with measures of psychopathic traits, callous-unemotional traits and aggression revealed mostly the expected findings that were consistent with previous research showing null or low negative correlations of social anxiety with different forms of aggression and psychopathic traits.

Findings provide evidence that the SAS-A is a psychometrically sound instrument that shows measurement invariance between genders, good reliability and positive correlations with empathy.

P24 Psychometric Properties of Turkish Adolescent Time Inventory-Time Attitude (ATI-TA) Scores

Hülya Şahin Baltacı, University of Pamukkale, Turkey, Özlem Tagay, Özlem, Turkey, Frank C. Worrell, University of California, USA, et al.

The Adolescent Time Inventory (ATI; Mello & Worrell, 2007) is a relatively new measure developed to assess several aspects of time perspective. Time attitudes refer to positive and negative feelings about the past, present, and future. In the current two-sample paper, we examined the internal consistency, structural validity, and convergent validity of scores on the time attitude subscales (TA) of the Turkish ATI (Authors, 2015).

Results from Sample 1 (N = 244) indicated that scores on five of the six Turkish ATI-TA subscales—Past Positive ($\alpha = .78$), Past Negative ($\alpha = .83$), Present Positive ($\alpha = .81$), Present Negative ($\alpha = .79$), and Future Positive ($\alpha = .81$)—were internally consistent, and confirmatory factor analyses (maximum-likelihood robust) provided strong support for the structural validity of a five-factor model as well as the hypothesized six-factor model, $\chi^2 [390] = 387.42$, $p < .05$, CFI = .972, TLI = .969, RMSEA = .025 [.010, .036], SRMR = .053, even though internal consistency estimates for Future Negative scores (the sixth factor) were unacceptably low ($\alpha = .53$). The fit improved when Factor 6 was dropped, $\chi^2 [265] = 297.29$, $p > .05$, CFI = .981, TLI = .978, RMSEA = .022 [.000, .035], SRMR = .048.

Results from Sample 2 (N = 350) provided additional internal consistency ($.71 \leq \alpha \leq .87$) and structural validity evidence for scores on the five-factor model, $\chi^2 [265] = 483.84$, $p < .001$, CFI = .921, TLI = .910, RMSEA = .049 [.042, .055], SRMR = .058, and also provided evidence of convergent validity with self-esteem (-.49 to .40), well-being (-.23 to .63), and optimism (-.43 to .47), with correlations in the theoretically consistent directions. Analyses also indicated that scores on the five subscales—Past Positive, Past Negative, Present Positive, Present Negative, and Future Positive—demonstrated configural and metric invariance; configural, metric, and scalar invariance was found for the two past and two present subscales. We concluded that these five subscales can be used with Turkish adolescents and that the Future Negative subscale needs to be revised and validated in this national context.

P25 The Adolescent Multidimensional Social Competence Questionnaire (AMSC-Q): analysis of its reliability and cross-cultural robustness.

Olga Gómez-Ortiz, Eva M^a Romera, Rosario Ortega-Ruiz, Mauricio Herrera López, University of Córdoba, Spain, & James O'Higgins Norman, University of Greenwich, UK.

The importance of achieving a high level of social competence (SC), as a means of developing healthy psychosocial adjustment in children and young people, has been widely reported in research. The definition of this competence has evolved from one-dimensional perspectives which identify SC as a set of emotional and social abilities or with socio-metric status to more complex multi-dimensional perspectives. Among the aspects to bear in mind are those which highlight social and emotional skills, the perception of social acceptance, adjustment to the rules, conventions and values of the environment and the perception of efficacy in social interaction. Although there are numerous self-reporting instruments to evaluate SC, few have focussed on the adolescent period, and of those which have, the majority start from one-dimensional perspectives which are particularly centred on the evaluation of social skills. The Adolescent Multidimensional Social Competence Questionnaire (AMSC-Q; Gómez-Ortiz, Romera & Ortega-Ruiz, under review) is a recently-

developed instrument which assesses five essential SC dimensions. This scale has shown adequate psychometric properties for use with adolescents in Spain, but has not been validated for use with young people from other countries. Thus, the aim of this paper has been to validate AMSC-Q with young people from different cultural backgrounds and testing its cross-cultural robustness. The incidental sample was made up of 4207 high school pupils (50.8% female). The pupils were aged between 11 and 19 years ($M = 14.94$; $SD = 1.73$). 48.9% of them were Spanish, 42.8% Colombian, 8.3% Irish. The questionnaire is a seven point agreement Likert scale with 26 items. The Confirmatory Factor Analysis (CFA) results corroborated the original factorial structure of the questionnaire composed of five dimensions: prosocial behaviour, social adjustment, normative adjustment, perceived social efficacy and cognitive reappraisal. The results of the multiple-group analysis indicated evidence of invariance across the cultural groups. The instrument also showed an appropriate internal consistency in total and in all of the subscales, producing these results in the general sample composed of pupils from Spain, Columbia and Ireland, and in each of the subsamples of each specific country. These results corroborate the cross-cultural robustness of the instrument, validating its use with adolescents in Spain, Columbia and Ireland. The implications of studying SC from a multidimensional perspective and its importance to promote effective interpersonal relationships are discussed.

P26 Psychometric Properties of the Olweus Bully/Bullied Questionnaire in an adolescent sample from Argentina

Santiago Resett, & Pablo Gonzales Caino, Universidad Argentina de la Empresa

Bullying is an important risk factor for mental health of children and adolescents. However, these problems increase remarkably in adolescence. Bullying is a subset of aggressive behavior, generally defined as an act intended to inflict injury or discomfort upon another student. It is characterized by certain special features such as an asymmetric power relationship and some repetitiveness. However, it has been scarcely studied empirically in Argentina. The main objective was to explore the psychometric properties (factorial structure, internal consistency, test/retest reliability, construct validity and criterion validity) of a Spanish adaptation of the Revised Olweus Bully / Victim Questionnaire in Argentinean adolescents. It was administered to a convenience sample of 502 and 1151 high schools students in Argentina (45% males, mean age = 14.4). They completed the Revised Olweus Bully/Victim Questionnaire; Peer nominations of victimization and aggression of Juvonen et al.; the Cyberbullying Questionnaire of Calvete et al., and measures of inter- (Kovacs Child Depression Inventory for depression and Rosenberg Psychosomatic Scale for anxiety) and externalizing problems (ASEBA subscale antisocial behavior and aggression of Achenbach and Rescorla). SPSS 20 and AMOS 16 were used for analyses. Both exploratory (set up with de first sample) and confirmatory factorial (with the second sample) analyses indicated a structure of two related dimension: a subscale of being bullied and another one of being aggressor. In the confirmatory factorial analysis, this model showed adequate fit indexes ($CFI = .95$, $TLI = .92$ and $RMSEA = .06$) and it was much better than a two alternative model: a model of two factors unrelated and a unifactorial model ($.CFI = .86$, $TLI = .82$ and $RMSEA = .09$ and $CFI = .70$, $TLI = .66$ and $RMSEA = .12$, respectively). This factorial structure is similar to those reported by Kyriakides et al. and Hartung et al. Cronbach's Alphas were good for being bullied subscale and bullying subscale, .87 and .85 respectively. As regards to validity, both subscales suggested construct validity with Calvete cybervictimization subscale and cyberaggression subscale ($r_s = .61$ and $.56$, respectively). Also, both Olweus subscales

presented significant relationships with depression and anxiety ($r_s = .36$ and $.32$) and aggressive behavior and antisocial behavior ($r_s = .46$ and $.44$). Criterion validity was detected as suggested significant relationships with peer nomination for being victims and being aggressor ($r_s = .30$ and $.25$, respectively). Also, test re-test reliability was detected for a time-interval of six month ($r_s = .62$ and $.56$, respectively). Argentina is a country not so developed and belonging to a different cultural tradition (Latin tradition) compared to North America and North Europe. However, these results suggest that Olweus Questionnaire could be a measure with good psychometric properties in this nation.

P27 Examination of the Factor Structure of a Prosocial Moral Reasoning Measure for Young Adolescents from Slovakia, Spain, and the United States

Gustavo Carlo, University of Missouri, USA, Martin Brestovansky, University of Trnava, Slovakia, Maria Mestre, University of Valencia, Spain, et al.

Scholars have often noted the importance of moral reasoning as a marker of moral development and a predictor of moral behaviors (Carlo, 2014). Although moral reasoning has been assessed in various contexts, prosocial moral reasoning (i.e., thinking about opportunities to help others when one's desires or needs are in conflict with the other's needs in the absence of formal social rules, laws or regulations) is one form that has been conceptually and empirically linked to prosocial behaviors (i.e., actions intended to benefit others) (Eisenberg et al., 2006; Jaffe & Hyde, 2000).

Despite the relevance of prosocial moral reasoning to understanding prosocial and moral development, few measures exist. The Prosocial Reasoning Objective Measure (PROM) is the most commonly used paper-and-pencil measure of prosocial moral reasoning, and this measure has been validated to use with middle to late adolescents (Carlo, 2014). Although one previous study demonstrated supportive evidence of the psychometric properties of the PROM in U.S. youth (Carlo et al., 2010), confirmatory factor analyses of the PROM in youth from Slovakia and Spain do not exist. The present study was designed to examine the internal structure of the PROM in early adolescents from Slovakia, Spain, and the U.S. Three samples of early-adolescents were part of this study, 490 (48% girls, Mean age = 12.26 years, $SD = .441$ years) from Spain, 528 (50% girls, Mean age = 11.29 years, $SD = .515$ years) from Slovakia, and 207 (51% girls, Mean age = 10.91 years, $SD = .84$ years) from the United States. Participants completed the PROM (Carlo et al., 1992).

Eisenberg's (1986) five-factor model (hedonistic, approval-oriented, needs-oriented, stereotypic, internalized) was tested using confirmatory factor analyses (CFA) in the three samples separately. Due to a high correlation between the stereotypic and internalized factors, the original CFA yielded convergence problems. As a result, a four-factor (stereotypic and internalized factors combined) and a three-factor (combining stereotypic, internalized and approval oriented types) model were tested (see Table 1). Chi square comparison tests were conducted in order to investigate whether the four- or three-factor models was more appropriate (see Table 2). Consistently, across all three samples, the four-factor model represented a better fit than the three-factor model.

Invariance tests for gender were conducted within each of the three samples. The results suggested that the four-factor model was invariant by gender in the Spanish and the US sample, but not in the Slovakian sample. Latent mean difference tests for the Spanish and the US samples showed no significant gender differences in any of the PROM factors.

P28 Measuring Mindfulness in Childhood and Adolescence: an Item Response Theory (IRT) analysis of the Italian version of the Child and Adolescent Mindfulness Measure (CAMM).

Antonio Dellagiulia, Salesian University Rome, Italy, Francesca Chiesi, University of Florence, Italy, Francesca Lionetti, Queen Mary University, London, UK, et al.

Along with the increasing interest of psychology and western culture for mindfulness practice, and with successfully attempts of using mindfulness as a preventive and clinical approach (Brown, 2015; Gu, Strauss, Bond & Cavanagh, 2015), several measures have been developed for investigating mindfulness in adulthood. Conversely, up to now, less studies have proposed and analysed reliable measures for investigating mindfulness in children and adolescents. The Child and Adolescent Mindfulness Measure (CAMM - Greco, Baer & Smith, 2011) has been specifically developed to assess mindfulness skills in childhood and adolescence. The main aim of this study was to investigate the psychometric properties of the Italian version of the CAMM by applying Item Response Theory (IRT). To the best of our knowledge, no study thus far has examined the proprieties of the CAMM employing an IRT approach. Specifically, we investigated: (1) how well each item of the CAMM concurred in measuring mindfulness in children and adolescents; (2) how reliable the scale was in measuring the different levels of the trait; (3) whether items showed gender and age Differential Item Functioning (DIF). CAMM was administered to a sample of 663 Italian student (358 boys; Mean age = 13.87, SD = 2.17; range: 11-18). Our results confirmed the unidimensional structure of the scale and provided evidence that, with few exceptions, the items were able to discriminate well among respondents with different levels of the trait being measured, and adequately covered the spectrum of the latent trait. Additionally, the whole scale showed adequate reliability in measuring mindfulness along a wide range of the measured trait. Finally, DIF analyses show that the whole scale appeared to be gender and age invariant (only one item exhibits DIF). Overall, IRT analyses confirmed the suitability of the CAMM for measuring mindfulness in Italian children and adolescents.

P29 The usage of the life history calendar for measuring organised out of school activities retrospectively among German adolescents

Karen Hemming, German Youth Institute

Educational processes within non-formal out of school activities can have great potential for adolescent's personal development. Research on the relevance of educational processes within these settings is comparably new. Lots of studies deal with positive effects such activities can have on adolescent's personal/social resources. Research reveals that effects can be found only if activities data are gathered for a longer period and not only at one point. However, funds are often limited and only a few longitudinal studies exist. The method of the Life History Calendar (LHC; Freedman et al., 1988) seems to be an efficient instrument to gather detailed information on out of school activities for a longer period. Hence, the current study aims to test the LHC-method for measuring organised out of school activities during school days retrospectively.

LHC has been used increasingly within the last decades. It was designed to facilitate and support the memory of past events with using a calendar structure. Evaluation studies revealed that LHC reduces recall errors and increases data reliability. Furthermore, answering the LHC seems to be an enjoyable experience. The current study is a pre-test of a self-administered LHC for out of school activities. The questionnaire was developed on the

basis of an existing instrument (Arnold et al., 2012) and tested among two German samples: pupils at their last year at lower secondary school (N=109, MAge=15.66, 56.0%male), students in their first year at University (N=81, MAge=21.31, 55.5%male). The respondents were instructed to think of their organised out of school activities during school days and then left to fill in the LHC self-administered. The following indicators were measured for each activity: duration, kind, intensity/frequency, person who chose the activity, fun. The completion of the questionnaire took 12.2min (mean). All respondents were able to: answer the LHC in general, remember how much they liked the activity, state how often they participated per week. Only a few could not remember precisely: activities in primary-school (12.0%), activities in secondary-school (0.9%), person who chose the activity (2.8%), class level of the activity (2.8%). Nearly all liked the: questionnaire altogether (96.2%), design (92.6%), clarity (98.1%). When asked for proposed amendments: 70% would keep it as it is, 11.1% would add more questions, 13.9% would modify/delete questions (mostly related to socio-demographic questions).

Following the evaluation results self-administered LHC could produce valid retrospective data on out of school activities and related indicators. However, data on activities in primary school have to be treated cautiously because some adolescents reported problems remembering them precisely.

P30 Investigation of Psychometric Properties of the Big-Five Inventory among Turkish College Students

Hasan Atak, Kirikkale University, Turkey and University of Minnesota, USA

Personality is one of the most important areas of psychology. Studies of personality focus on how a person differs from another person or how he/she resembles another person. The Big-Five Inventory, a self-reported multidimensional personality model, was designed to measure personality traits. Considering the personality studies carried out in Turkey, it is seen that there are scale development and adaptation studies related to measuring Five Factor Personality model. The scales used in these studies have either many items or they depend on adjective pairs. Studies within the literature concentrated on the scales measuring personality traits being easy to understand and the importance of its applicability in a short period of time. So, the present study aimed to assess the reliability and validity of the Turkish version of the BFI.

This is a descriptive study examining the current situation. A cross sectional research method was used and data were obtained from people of different ages. The adaptation study investigated language validity, followed by exploratory and confirmatory factor analyses. The reliability study examined two types of reliability: internal consistency coefficient and test-retest method. The participants consist of 426 individuals who attend a university in Ankara province and individuals of the same age who are not taking university education. The experimental group was selected via a purposive sampling method. The sampling method deliberately aims to select for one or more sub-dimension related to the objectives of the study rather than obtain a representative sample of a population. The Turkish version of BFI was administered to 426 (212 female, 49.8%; 214 male, 50.2%) college students (51.6%) and non-college (48.4%) young people aged between 19 and 25 (Mean: 22.72 years; Df: 1.44). Data collection instruments included BFI, Positive and Negative Affect Scale (PANAS) and Adjective Based Personality Test (ABPT).

The results of exploratory and confirmatory factor analyses and the results of convergence validity demonstrate that the Turkish version of the BFI consisting of 24 items and 5 sub-

scales was sufficient for measuring personality and explained 57.36% of the variance of the scale. In order to examine the reliability of the scale, the internal consistency and test-retest stability were assessed via Cronbach's alpha scores. Cronbach's Alpha reliability coefficient of the scale was 0.82 for the Openness sub-scale, 0.80 for Agreeableness sub-scale, 0.85 for Neuroticism sub-scale, 0.86 for Conscientiousness sub-scale and 0.85 for Extraversion sub-scale. The results show that the internal consistency of the scales is within acceptable ranges. Test-retest reliability coefficients were found to be 0.88 for the Openness sub-scale, 0.86 for Agreeableness sub-scale, 0.90 for Neuroticism sub-scale, 0.88 for sub-scale Conscientiousness sub-scale and 0.87 for Extraversion sub-scale. The results indicated that the BFI has strong psychometric properties for the sample of the study.

P31 Employability as a Positive Developmental Factor in Youngsters: Spanish Adaptation of an Assessment Scale of Employability.

Reyes Vargas, Inmaculada Sánchez-Queija, & Águeda Parra, University of Sevilla, Spain

The recent unprecedented financial crash which Spain is undergoing has provoked an alarming unemployment situation. These levels are especially worrying among youngsters. This is a sector of the population whose unemployment rate goes up to a 37% of people aged 16-29, of whom 24.2%, have a university degree (Spanish Youth Council, 2015). The aim of this paper is to validate the Self-Perceived Employability Scale for university students in Spain. This scale measures the perception of university students about their employability; known as the capability of getting and keeping a job post (Rothwell & Arnold, 2007). This scale would allow us to know the possibilities to have access and keep a job for young people, which could be used as a starting point, as a diagnostic instrument to professional counsellors and career guides. This instrument would be a tool which may as well, be used for the design of intervention plans. It must also be used as an instrument of self-knowledge which allows the young university student to value his or her position with respect to his or her possibilities to access a job.

The research has taken place in Spain with a sample of 1502 university students, aged 18 to 29 (average age 20.32; SD: 2.13; 39.9 % females). The sample was collected in the University of Seville and in the University of Basque Country. In Seville University, data were collected from two different campuses: one in a rural area and another in an urban area.

The results from EFA showed a solution of four factors: the students' perception of their studies engagement; individual skills and behavior, the status and credibility of the students' field of study, and the influence of the state of the external labor market.

The scale showed an adequate level of reliability ($\alpha = .76$). The Self Perceived Employability Scale was related to socio-demographic variables. Males showed higher employability scores than females. Students in the rural campus showed higher employability scores than students in the urban campus. Regarding the knowledge area, Health Sciences area students scored the highest. Employability lower scores were for those having studied Arts and Human Sciences. Moreover, employability was related to emotional intelligence, as already suggested in the bibliography (Goleman, 1998; Moynaghand Worsle, 2005; Yorke and Knight, 2002). The Self- perceived employability questionnaire seems to be a good instrument to value employability. It could be a useful tool for career guidance and future research. The same way, it can be used as a diagnostic tool, and as a starting point to promote students and graduates' employability in their search for a job.

P32 Psychometric Properties of the Flourishing Scale in a Sample of Spanish Emerging Adults

Rocío de la Fuente, Parra Águeda, & Inmaculada Sánchez-Queija, University of Sevilla

Flourishing is a recent conceptualization standing for people's general well-being. It refers to the perception experienced by anyone whose life is going on well. It is a combination of feeling well, and working with efficiency (Huppert & So, 2013; Huppert, 2009a; Huppert, 2009b; Keyes, 2002; Ryff & Singer, 1998). There is a higher possibility a flourishing person would contribute to his or her community. They are healthier, have longer life expectancy, as well as better social relationships (Diener, 2009; Huppert, 2010). Flourishing is synonymous of having a high level of mental well-being; moreover, it accounts for mental health and positive development.

The flourishing scale (FS) (Diener et al., 2010), binds the essential components of recent welfare theories together. It is an adequate measure of general well-being. In fact, its major advantages compared with previously existing measures are its brevity and reasonable comprehension, which makes the scale easier to use solitarily or together with other tools.

The FS, which is composed of eight items, has good psychometric properties.

The purpose of this study was to evaluate the psychometric properties of the Spanish version of the FS. Spanish university students whose socio-cultural backgrounds differ are the subjects of the research. They come from Euskadi and Andalusia, two regions within Spain.

The sample was composed by 1502 university students. This number was achieved through collecting two samples, one from the University of Basque Country (65.2% females, average age = 19.95, SD age = 1.97, age range 18-29, N = 747) and the other, from the University of Sevilla (55.1% females; average age = 20.69, SD age = 2.21, age range 18-29, N = 755). The participants agreed to participate in the test session and fill in the following questionnaires: Socio-demographic Questionnaire; Flourishing Scale (Diener et al., 2010), the Spanish version of the Ryff's Scale of Psychological Well-Being, SPWB (Díaz et al., 2006) and the Spanish version of the Depression Anxiety Stress Scales: DASS-21 (Bados, Solanas & Andrés, 2005).

The reliability analysis and Multigroup Confirmatory Factorial Analysis (MCFA) revealed that the Flourishing Scale shows strong internal consistency. The one-factor structure was invariant across the two samples, according to the results from the original version of the Flourishing Scale (Diener et al. 2010) and other later validations. Results also demonstrated convergent and discriminant validity with PWBS and DASS scales.

According to the results of the study, FS could be appropriate for its use in assessing general wellbeing among emerging adults in Spain. It may be recognised as an alternative instrument in the evaluation of the positive mental health, as well as a complementary tool to estimate young adults' general health. FS may as well be recognised as a potential tool for prevention and community involvement in the future.

P33 Measuring Solitude: Validation of the Motivation for Solitude Scale Short Form (MSS-SF) in a Sample of South African Adolescents

Esmarilda Dankaert, University of Johannesburg, South Africa

Solitude, an objective state of voluntary aloneness, can be viewed as either negative or positive. When negative, solitude can be compared to loneliness; when positive, it could be constructive and beneficial. Solitude experiences could also indirectly contribute to

psychological development tasks, such as individuation, autonomy, and identity formation, which are all key phases during adolescence.

Currently, there are very few instruments to measure solitude among adolescents and which consider the underlying motivation (negative or positive) for solitude. These measures have also not yet been widely examined in terms of validity and reliability among diverse groups of adolescents. Considering that solitude takes on its meaning and function from the surrounding socio-cultural context, it is important to establish whether existing solitude measures are appropriate for use within multicultural contexts.

The aim of this study was to determine the validity and reliability of the Motivation for Solitude Scale Short Form (MSS-SF) for use amongst South African adolescents.

The Motivation for Solitude Scale Short Form (MSS-SF) was administered to adolescents ($n=818$) attending high schools in the Gauteng province of South Africa. In addition, measures on loneliness and psychological wellbeing were also completed. Data analysis was subsequently performed to examine the internal consistency, factor structure, as well as convergent and discriminant validity of the MSS-SF.

The two subscales of the MSS-SF showed satisfactory internal consistency ($\alpha = .79$; $\alpha = .85$), as well as convergent and discriminant validity. The latter was evident from significant correlations with other criterion measures. Confirmatory factor analysis evidenced for a two factor higher order model as providing the best model fit, with complementary fit indices of CFI = .99; TLI = .98; RMSEA = .04, [.03, .05].

The MSS-SF proved to be a valid and reliable measure that can be used to assess adolescents' solitude preferences. The findings add to existing knowledge on measuring solitude which is important for further research on the correlates and dynamics of solitude among diverse groups of adolescents.

ADOPTION AND FOSTER CARE

P34 Breakdown in Adoption and Foster Care: The Role of Adolescence

Jesús M. Jiménez-Morago, Jesús Palacios, & Carmen Paniagua, University of Sevilla, Spain

Although most adoption and foster care placements are successful, some face serious difficulties that can lead to the final separation of carers and children earlier than expected or planned. Typically, these unwanted separations are the consequence of a combination of circumstances, in which the family, children and professional intervention each make their own specific contribution. Although no single factor sufficiently explains breakdown, this presentation focuses on one of the factors in the process leading to a definitive separation: the role of adolescent children in the breakdown experience.

Data were collected for adopted children whose adoption failed during the decade 2003-2012 and for fostered children whose placement failed during 2012-2013, living in Andalusia (Spain). For these time periods, 69 cases of adoption and 116 cases of foster care breakdown were identified. Child protection records were studied for each of the cases and relevant information was drawn from them relating to birth families, adopted children, adoptive parents and professional intervention.

Results show the important influence of the adolescents in the onset, reappearance or worsening of problems in the family. With respect to adoption, the problems reappeared or worsened during these years in 40% of the families, and the problems appeared from the first time in 27% of the families. Regarding foster care, problems reappeared or worsened in 28%, and appeared from the first time in 30% of the families. Statically significant

differences were found between kinship and non-kinship ($p = .006$) placement. In 40% of the kinship families the problems appeared for the first time during adolescence, however in 50% of the non-kinship families the problems reappear or worsened. The average age of breakdown was 12 years in pre-adoption placements, international adoption and non-kinship foster care, and 14 years in domestic adoption and kinship foster care. In conclusion, adolescence plays an important role in the experience of adoption and foster care breakdown. It is necessary to identify problems and offer support to the adoptees and families before the children reach adolescence. Additionally it is important that families who adopt or foster receive more professional support to prevent breakdown during these years.

P35 Quality of Parent-Child Relationships During Adolescence: A Comparison Between Adopted And Non-Adopted Youth

Carmen Paniagua, Antonia Jiménez-Iglesias, Irene García-Moya, Maite Román, & Jesús Palacios, University of Seville, Spain.

Most of what is known about adoption, from a developmental perspective, refers to adopted children and to parent-child relationships. In comparison, much less is known about adopted adolescents and their family relationships. The study reported in this presentation refers to parent-child relationships during adolescence, comparing a sample of adopted youth with a large reference group of their non-adopted peers.

Participants were selected as part of the 2014 edition of the Health Behaviour in School-aged Children (HBSC) study. The questionnaire was answered by 394 adopted adolescents; 47.5% boys, 52.5% girls; 39.3% domestic adoption, 60.7% international adoption. A representative sample of 28,373 non-adopted adolescents was used as a comparison group. Family context was assessed through scales measuring affection, communication, parental knowledge, family support and satisfaction with family. Affection was assessed by means of the 4-item subscale of the Parental Bonding Instrument (PBI-BC; Parker, Tupling, & Brown, 1979). Communication with parents was explored using a scale designed by the HBSC international network. The assessment of parental knowledge was based on the scale developed by Brown, Mounts, Lamborn, and Steinberg (1993). Family support was assessed with the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988). Satisfaction with family relationships was measured by means of an item adapted from Cantril (1965).

Mean comparisons (Student's t) and Cohen's d effect size tests were used to compare adopted and non-adopted adolescents, controlling for adolescents' gender and age in all analyses. Data analysis showed that the control group and the adoptees are very similar in affection, parental knowledge, parental communication and family support. However, adopted adolescents perceive a lower family satisfaction ($p = .002$, $d = .22$) than non-adopted adolescents.

During adolescence adoptees are confronted with normative challenges similar to those faced by their non-adopted peers. Nonetheless, they face additional challenges related to their adoption status, mainly concerning identity and their search for origin. This could be the context to interpret the findings in this presentation: even if they do not lack parental affection or knowledge, their satisfaction with family relationships do not reach the levels enjoyed by their non-adopted peers. However, there are more similarities than differences between adopted and non-adopted adolescents.

P36 School performance and teachers' perceptions about adolescents in residential care and their classmates

Laura Verdugo, Melania Creo, Sandra Melero & Yolanda Sánchez-Sandoval, University of Cádiz, Spain

Adolescents in residential care (RC) can have more school adjustment difficulties, affecting their academic performance. In addition, they can have more problems in their social relationships because they are perceived as more troubled and aggressive. The main purpose of this study is to assess the school adjustment of boys and girls in residential care in Cádiz (Spain).

Participants were adolescents in residential care (n=46) who lived in Foster homes in the Bay of Cádiz and surroundings, and a control group composed of 743 of their classmates. Their ages were between 11 and 19 years, with a mean of 14.9 years. The measures were: the Scale of Teacher's Perception of School Adjustment (PROF-A) (Cava & Musitu, 1999) and a table where students wrote their last grades.

The failures and the lowest grades were more frequent among children in residential care. The highest grades were more frequent in their classmates. Boys and girls in residential care had worse average grades than the other participants. Teachers' perception was more positive for the classmates group than the residential care group, but no significant differences were found in the global scale between them. Nevertheless, there were significant differences in the subscales of social adjustment and academic competence. According to other researches, the results showed that boys and girls in residential care had worse academic performance than their classmates. Moreover, teachers had a worse perception towards those children in comparison to the rest. This study identifies some specific academic needs of adolescents in residential care.

P37 Self-esteem, dysphoria and depression on adopted pre-adolescents

*Isabel Cáceres, Maite Román, Jesús Palacios & M^a Carmen Moreno
University of Seville, Spain*

The aim of this research is to study the depression symptomatology, dysphoria and self-esteem of adopted and institutionalized pre-adolescents, and the relation these conditions may have with their pre-adoption experiences, their current attachment representations and their personal difficulties.

Ninety-five pre-adolescents were analyzed, all of them with ages between eight and thirteen years old. The 33.7% were children internationally adopted who had been living with their adoptive family during eighty-seven months. These children were compared to 38 children living with their birth families, and to 25 institutionalized children who had been living in Spanish institutions for an average of 68 months. The average age of pre-adolescents at the assessment time was 11 years old.

Pre-adolescents were assessed with the Children Depression Inventory (CDI) and the Story Stem Assessment Profile (SSAP). Their parents filled the Strengths and Difficulties Questionnaire (SDQ). The assessment took place at the teenagers' homes and at protection centers.

No differences were found between pre-adolescents in depression symptomatology or self-esteem, but institutionalized and adopted pre-adolescents showed higher levels of dysphoria than the control group. These results were not related to early history variables. However, depression symptoms were associated with mental representations of

attachment, especially insecurity and disorganization, in adopted pre-adolescents and with personal difficulties in pre-adolescents living with their biological parents. A small group of adopted children (15.6%) showed clinical scores in depression, and they also showed higher disorganization in attachment and more behavioral problems than the rest of adopted pre-adolescents.

It could be concluded that adoption does not mean a risk factor to depression in early adolescence. After more than seven years living with their adoptive families, early experiences do not seem to be related to their current depressive symptomatology. That shows the impressive ability pre-adolescents have to recover from early experience of adversity.

P38 Internationally adopted children become adolescents: physical, cognitive, emotional and social development

Maite Román, Jesús Palacios & León Esperanza, University of Sevilla, Spain

The developmental study of internationally adopted children is a relatively common topic within psychological research. A number of studies have confirmed that even after living with the adoptive families for some time, there are certain limitations in the development of these children due to early adversity. However, once they have reached adolescences, the development of adoptees has been explored very little.

This research studies a group of 24 pre-teens between 9 and 12 years of age who were adopted in Spain from the Russian Federation. Previous studies, when this same group was assessed between 4 and 8 years of age, and after being adopted for three years, showed that these children presented a number of limitations in a variety of developmental areas (Palacios, Román, León, Moreno & Peñarrubia, 2015). Four years later, when these children are now pre-teens and have lived with their adoptive family for an average of seven years, what has happened? The results have been compared with those obtained from a control group with 35 pre-teens, matched by age and with no experience of adversity or institutionalization.

Physical development was assessed using anthropometric indicators for height, weight and head circumference. Cognitive development was examined using Kaufman Brief Intelligence Test (K-BIT; Kaufman & Kaufman, 1990) and self-esteem by means of Child Depression Inventory (CDI; Kovacs, 1992). Behavior problems and pro-social behavior were assessed using The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) completed by the mothers.

The results showed that there were no significant differences in height and weight when comparing adopted children with the control group; the only difference was head circumference where the scores were lower among adopted children. In contrast, there were significant differences between groups in terms of cognitive development, with the adopted children having lower scores. When studying self-esteem, the results were similar for both groups, as was the case when comparing emotional symptomatology, behavioral problems, and problems with peers or pro-social behavior. Hyperactivity, however, was higher among adopted children than in the control group.

At the developmental level and in pre-teen adopted and non-adopted children, these results indicate that there were more similarities than differences. However, limitations were found in the adoptee group for head circumference, cognitive development and hyperactivity. The results underscore the long-term impact of early adversity and the differential recovery of development.

INTERVENTION

P39 Moving toward evidence-based practices to promote family health with adolescents at risk: The novel psychoscene approach

Bárbara Lorence, University of Huelva, Spain, Jesús Maya, Spain, M. Victoria Hidalgo, University of Sevilla, Spain et al.

The development of evidence-based practices is one of the main concerns in psychosocial interventions with adolescents at risk. From this perspective, programs with an explicit theory of change should test its effectiveness. Nowadays, an ecologic-systemic model of change is employed, and the number of programs that work with the entire family system (including parents and adolescents) is increasing. Among the variety of interventions developed from this perspective, the psychoscene model constitutes a novel approach. This approach comes from psychodrama, combining dramatic techniques (with an actor) and therapeutic techniques (with a therapist) jointly in the process of change. Despite its growing interest, there is no available research evaluating the effectiveness of this new approach. The objective of this study was to evaluate the effectiveness of this pioneering approach with at-risk adolescents and their parents. Method: Ten trials representing the whole population benefited from a group-based psychoscene program in 2015 (Seville, South of Spain) were included in this study. Forty parents benefiting from this intervention were evaluated at pre-test and post-test. Program effectiveness was tested with repeated measure ANOVA's. Family cohesion (The Family Adaptability and Cohesion Scales), parental practices (Parenting Styles and Dimensions Questionnaire and Parenting Scale) and emotional intelligence (Emotional Quotient Inventory) were examined. Results: Statistically significant and meaningful changes were observed for family cohesion and emotional intelligence, although parental practices did not improve after the intervention. Conclusions: Improvement in emotional and relational dimensions highlights the therapeutic component of the psychoscene approach. Absence of change in parental practices is discussed from available evidence. This pioneer study goes further in supporting families and adolescents at risk for improving family health.

P40 The acquiring process of psychological assessment skills in Clinical Psychologist candidates.

Issui Manabe, Yasuno Takano, & Yuko Okamoto, Hiroshima University, Japan

Clinical psychological assessment is very important for clinical psychologists in acquiring assessment skills. However, no research exists that indicates how clinical psychology candidates acquire assessment skills.

Manabe (2013) revealed a process of helping professional identity development in young professionals. This model included the four categories of orientation, exploration, evaluation, and support; it explained professional identity development and can potentially explain more minor explorations, such as acquiring assessment skills. Fostering development of clinical psychologists' professional identity will reveal the process of how they acquire assessment skills. Thus, the central research aim was to generate a process model for acquiring assessment skills through the professional identity development model. Practical assessment training: First-year master's degree students participated. Students

administered the Wechsler Intelligence Scale for Children (WAIS-III) to undergraduate students and conducted a results feedback session. The WISC-IV was also administered to children at a university hospital paediatrics department. In the WAIS-III session, the tester asked the testee about current needs and developed a feedback paper to answer the questions.

We conducted interviews with five students; three students had used the WISC-IV prior to this practical assessment training.

After submission of the psychological findings to the university hospital, we conducted semi-structured interviews with each participant. Two authors rated the narratives separately and calculated the concordance rate.

The following questions were generated to elicit participants' narratives for exploration, evaluation, and support.

- 1) How did you acquire skills for administering the WAIS-III and WISC-IV? Who helped you with hints or models for acquiring these skills?
- 2) Who supported you with acquiring these skills? Did you experience emotional difficulties; if so, who supported you with these difficulties?
- 3) How did you obtain a sense of accomplishment, feelings of inadequacy, or evaluate your own skills when administering the WAIS-III and WISC-IV?

1) The average interview time was 25 m (SD = 6.7 m, min-max = 17-35 m).

2) Clinical psychology candidates acquired assessment skills in several ways; for instance, through modelling with a colleague (Introjection model) or through being tutored by a teacher who could provide a better understanding to the student (New understanding and improvement). Through their practical training, candidates gained a sense of accomplishment (Giving positive meaning to own experience) or lacked feelings of accomplishment (e.g., Feelings of inadequacy and ineffective exploration). Candidates were supported by other colleagues and the teacher (e.g., Sharing difficulties and joint struggles) in the process of exploration and evaluation.

Manabe (2013) noted that young professionals in the helping fields develop their professional identity through interactions with others. The present results further validate the process of acquiring assessment skills via interactions.

